

UNIT-1:

1. Explain about 4-quadrant operation of DC Drive (Hoist Control)?
2. Explain briefly the following methods of braking of a D.C Motor
 - (a) Regenerative braking
 - (b) Dynamic braking
 - (c) Plugging.
3. What is meant by Stability? Explain about Steady State Stability?
4. Write about Fundamental Torque equation with various notations present in it?
5. Explain about Load Equalization of DC Drive?

UNIT-2:

1. Distinguish between circulating current and non-circulating current mode of operation.
2. Explain Speed torque Characteristics of a dc series motor connected to a three ph fully controlled converter.
3. Explain Speed -Torque Characteristics of a dc separately excited motor connected to a three phase fully controlled converter.
4. Explain how four-quadrant operation is achieved by dual converters each of 3ph full wave configuration for dc separately excited motor.
5. What is a dual converter? Explain the principle of operation of a dual converter in circulating current mode. How the same is used for speed control of dc drive.